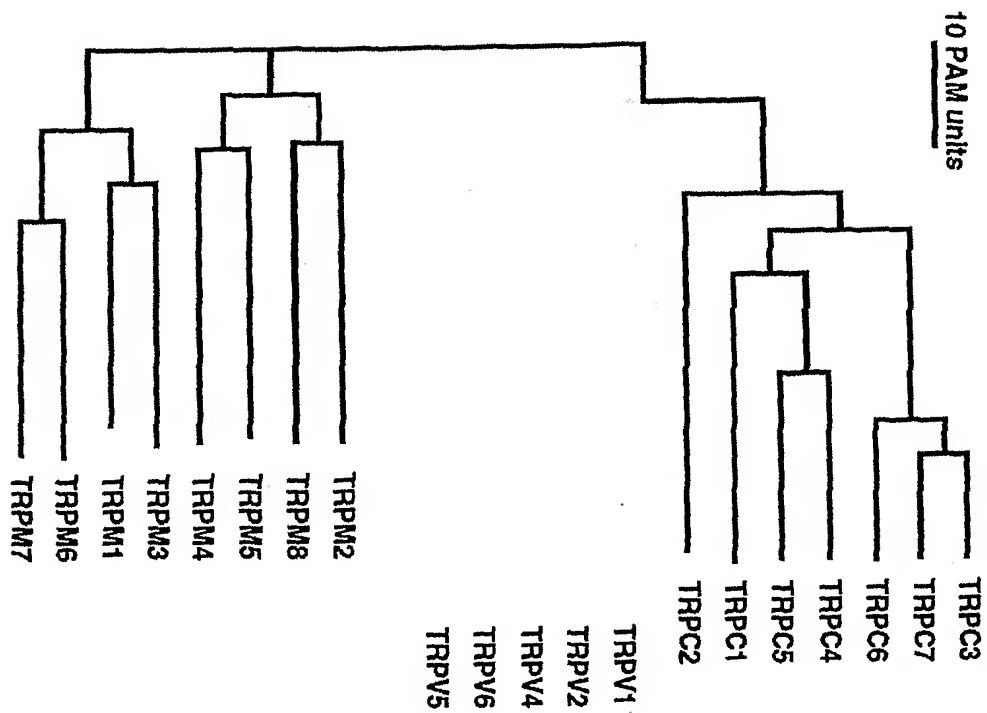


1/14

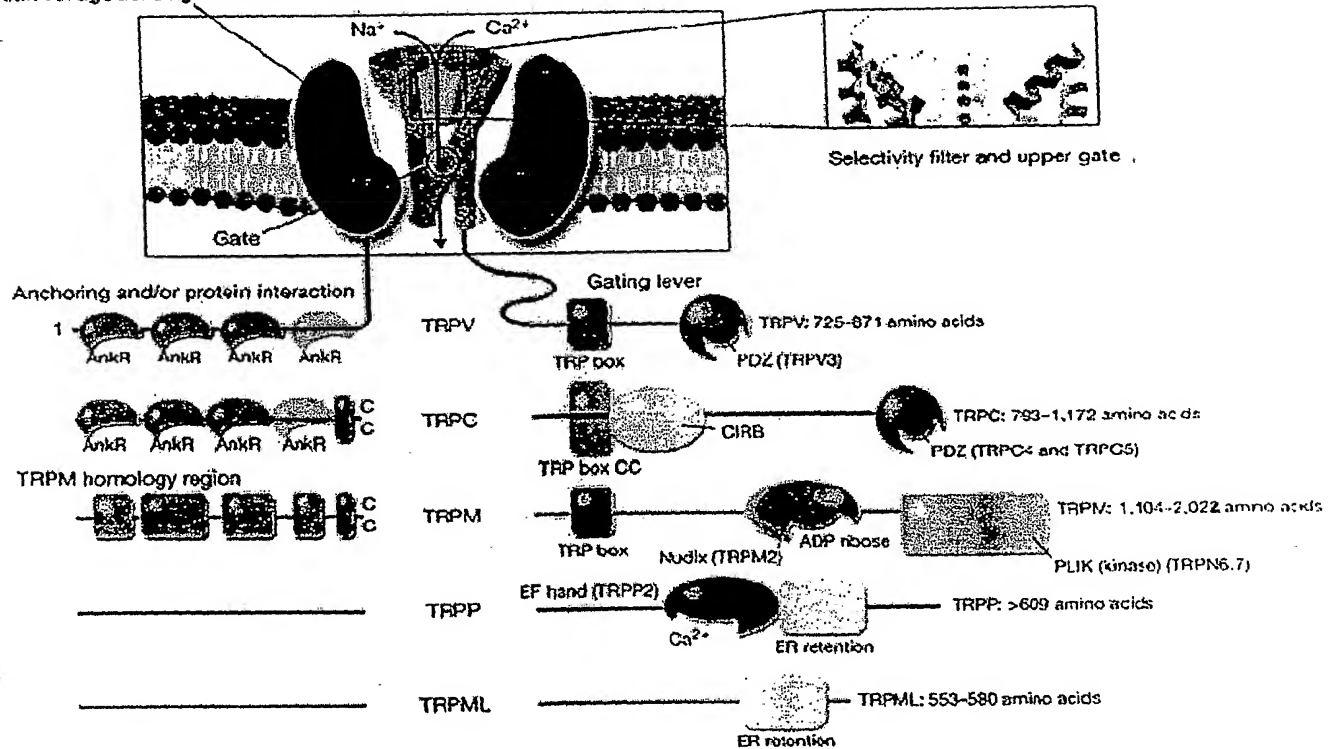
Figure 1



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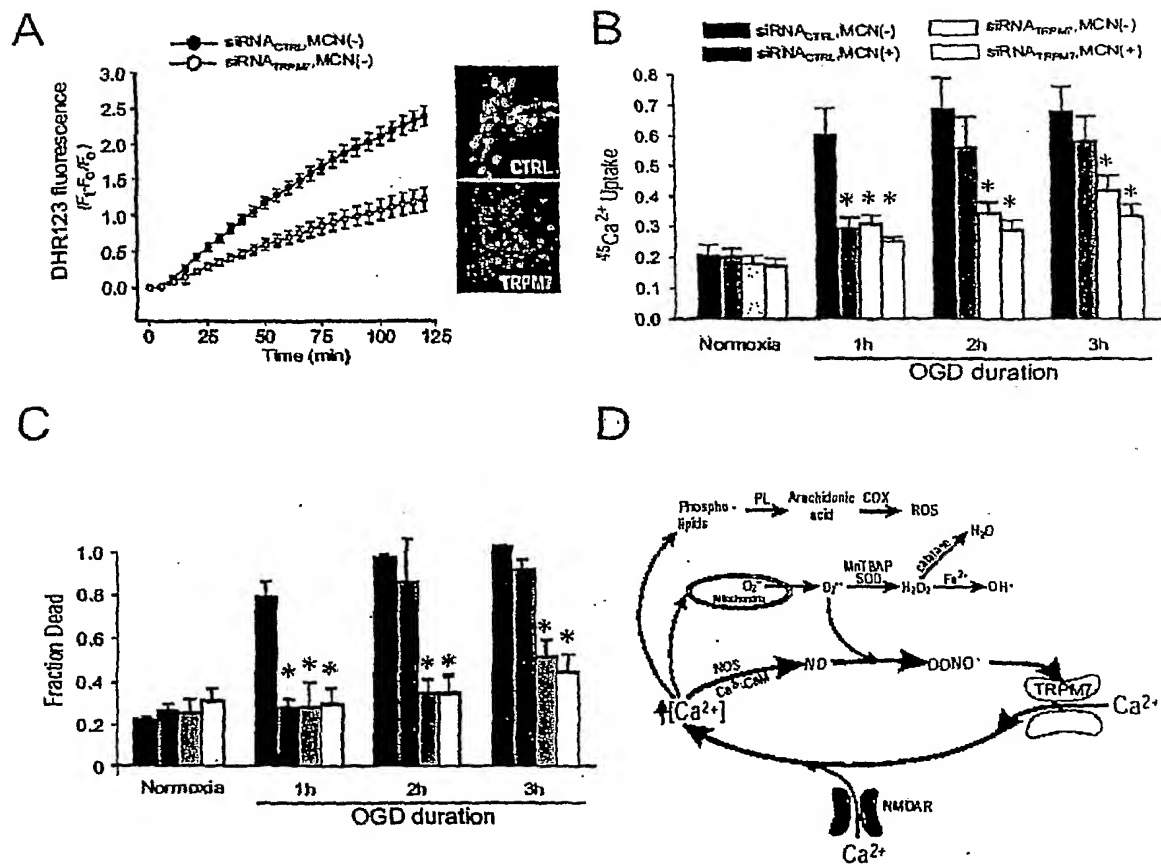
Figure 2

S1-S4 transmembrane domains
Weak voltage sensing



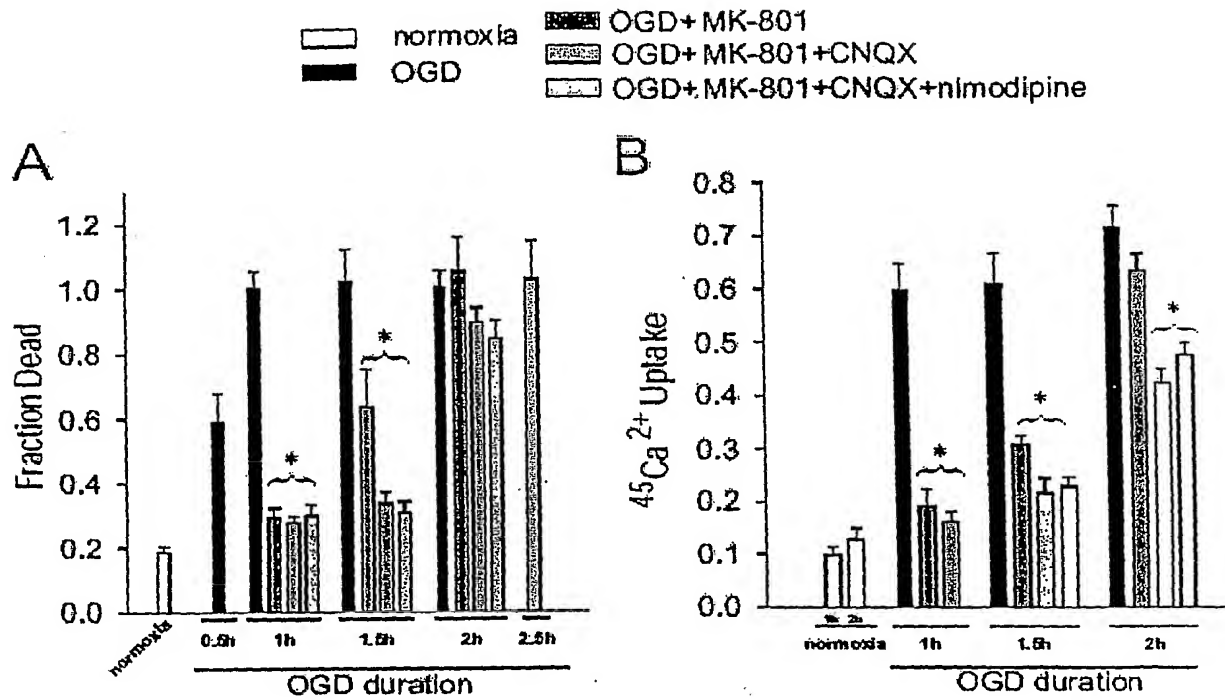
3/14

Figure 3



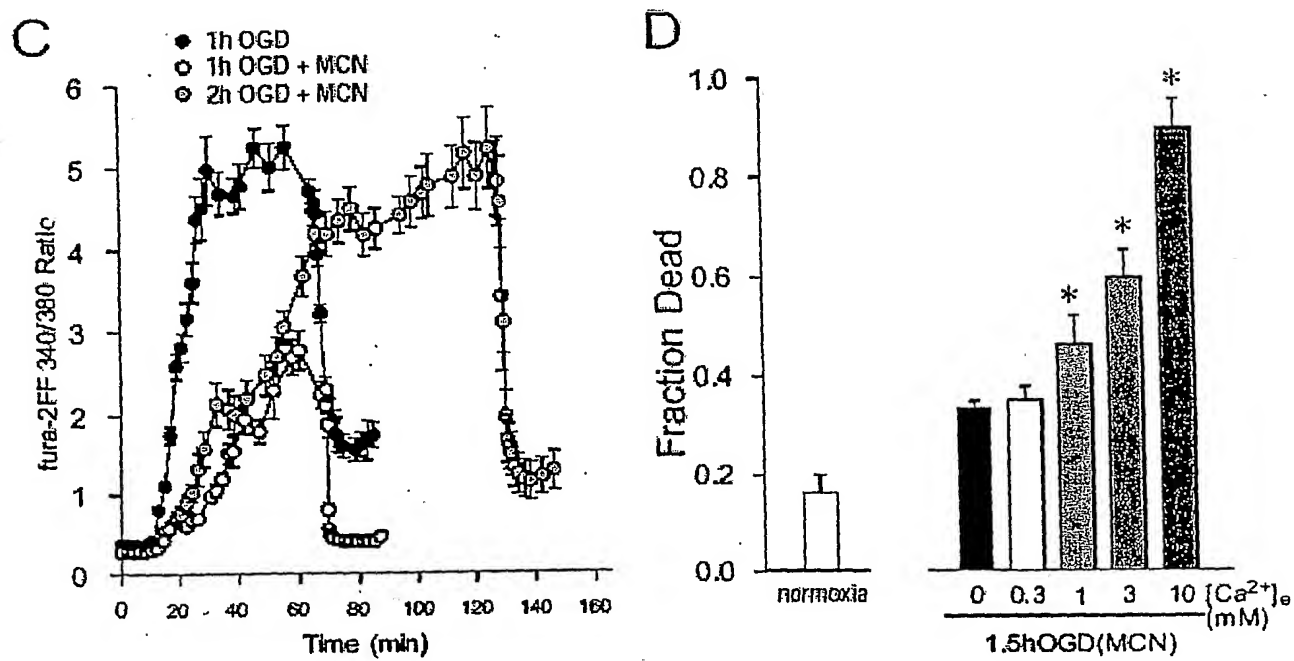
4/14

Figure 4



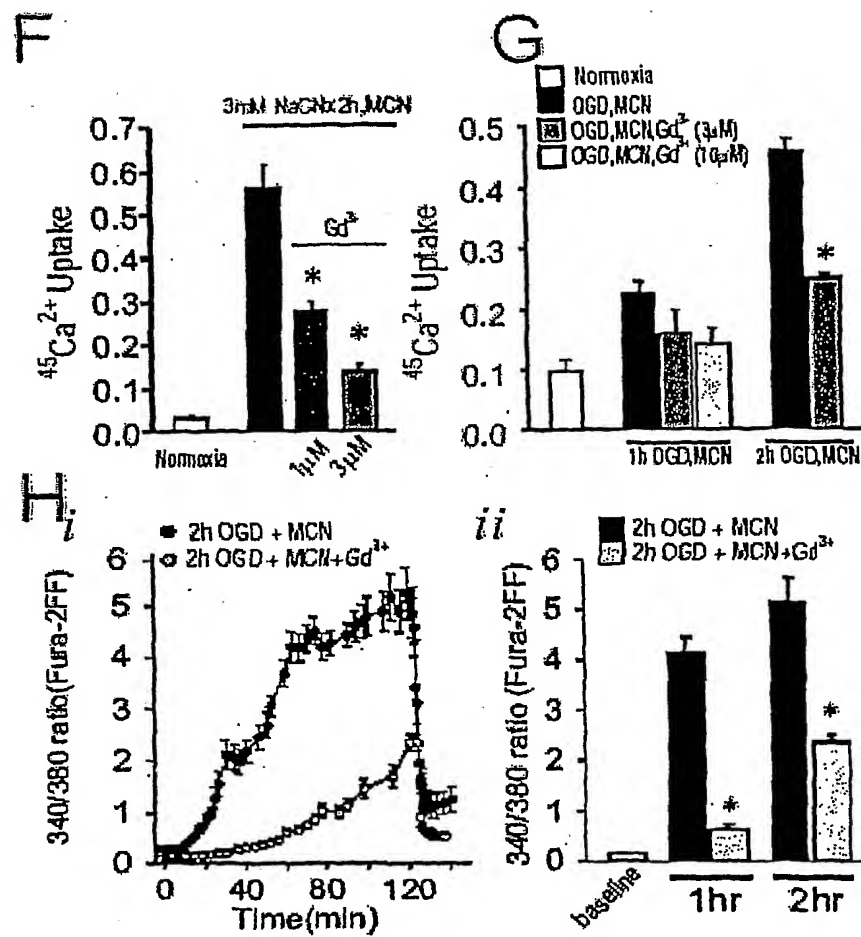
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Figure 5



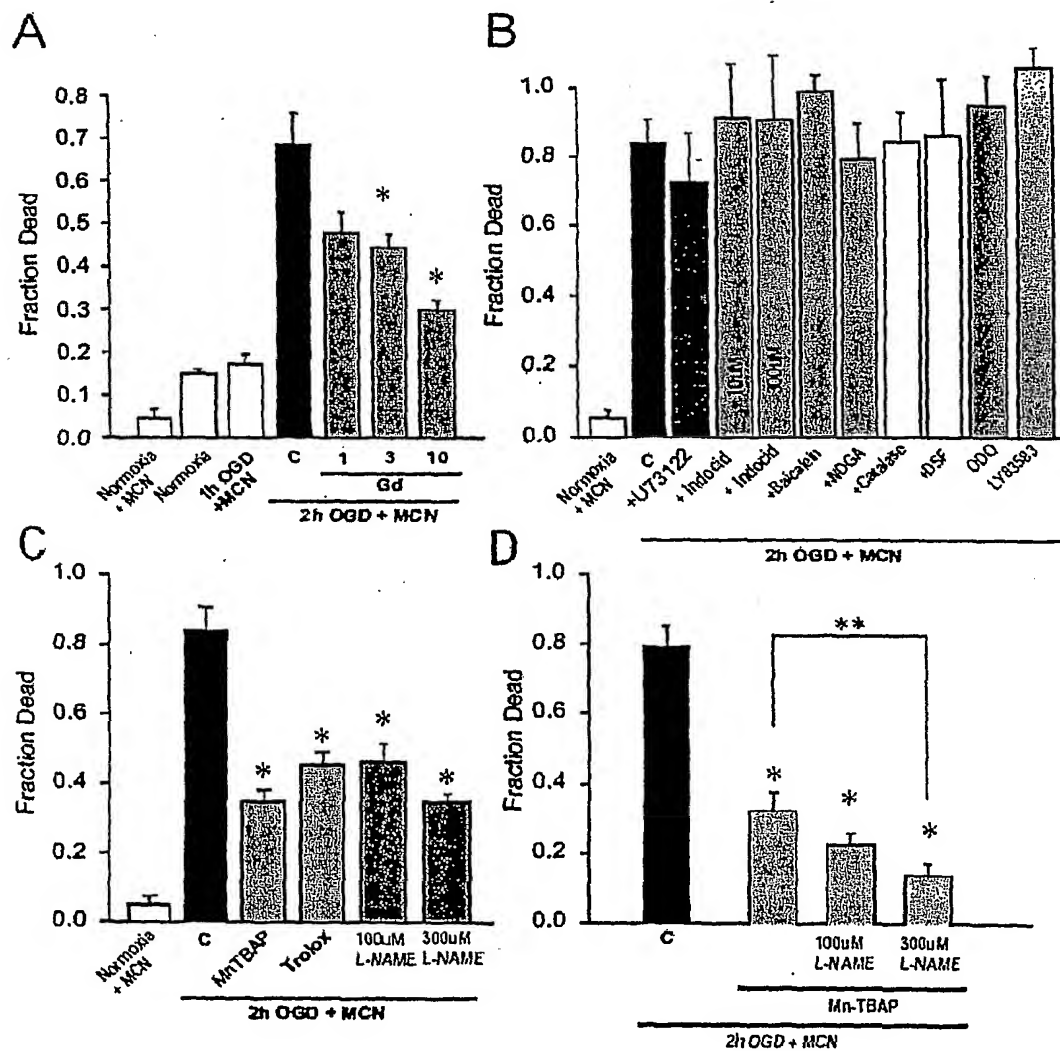
6/14

Figure 6



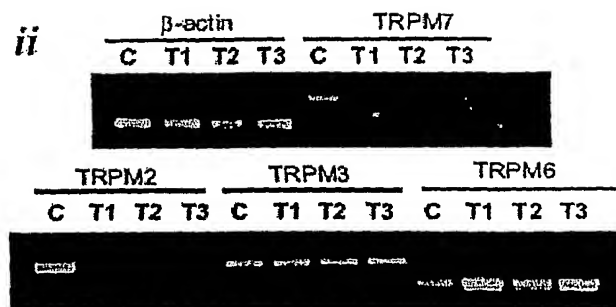
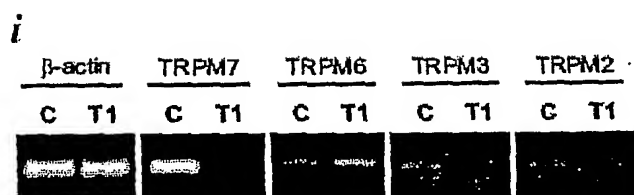
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Figure 7



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Figure 8



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Fig. 9A Titration: TRPM7 peptide/ RIM2 d1

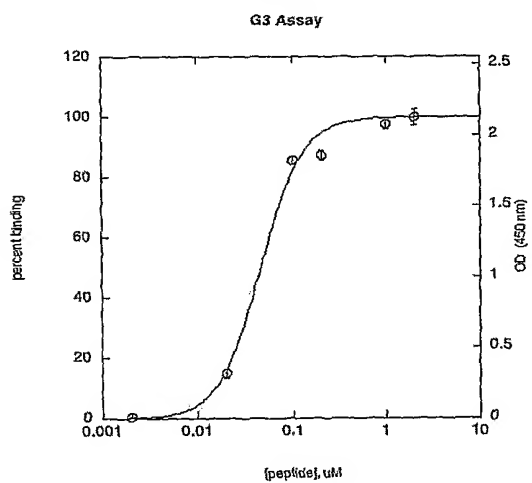


Fig. 9C Titration: TRPM7 peptide/ ZO-1 d2

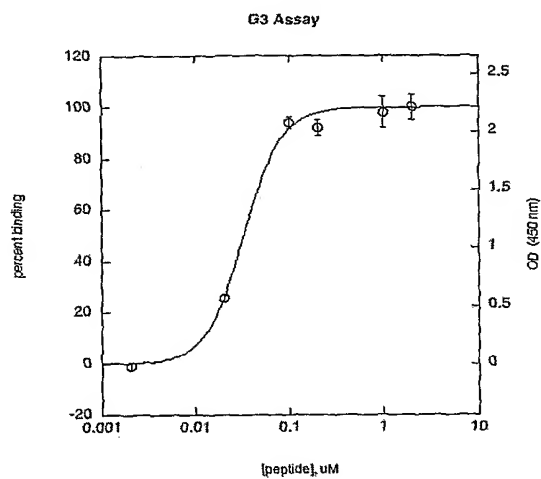


Fig. 9B Titration: TRPM7 peptide/ INADL d3

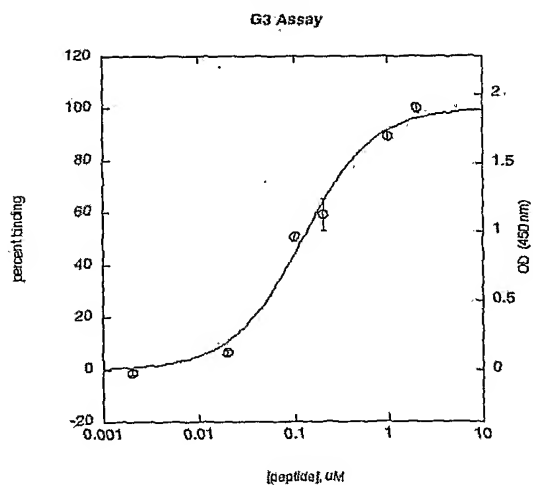
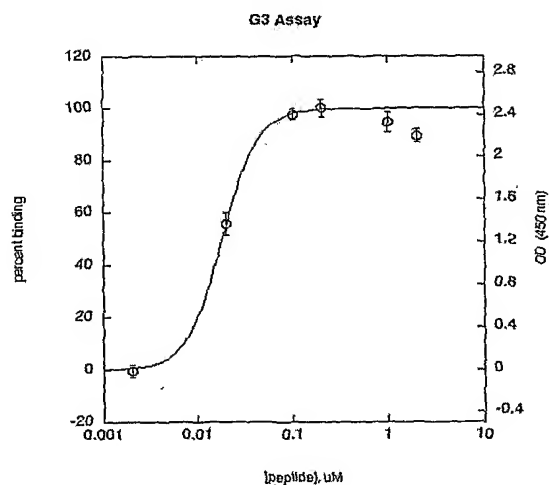


Fig. 9D Titration: TRPM7 peptide/ Par3 d3



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Figure 10A

Titration: Peptide 1829/ ZO-1 d2

G3 Assay

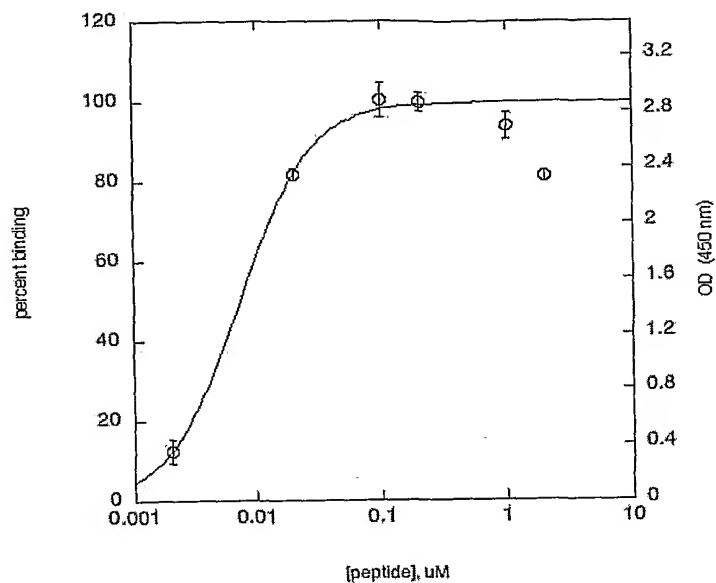
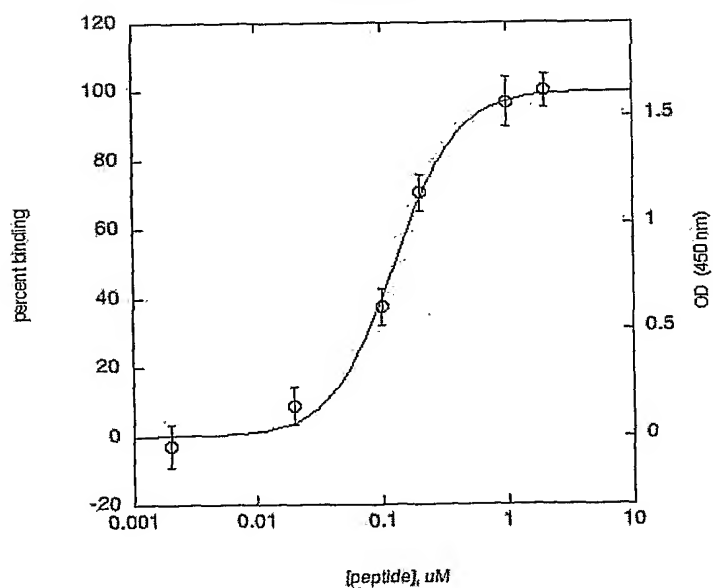


Figure 10B

Titration: Peptide 1839/ INADL d3

G3 Assay



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Layout of construct

Enzyme site (EcoRI) – H1 promoter – enzyme site (BamHI) – sense siRNA – loop – antisense siRNA – termination sequence – enzyme site (HindIII)

Sequence of Construct

GAATTCATATTTGCATGTCGCTATGTGTTCTGGGAAATCACCATAAACGTGAAATGTCTTT
 GGATTTGGGAATCTTATAAGTTCTGTATGAGACCACTCGGATCCGAGTGCATGACTGGTG
 AATTTCAAGAGAATTCACCAGTCATGCACTCTTTTTGGAAAAGCTT

siRNA Hairpin sequence

GAGUGCAUGACUGGUGAAUUUCAAGAGAAUUCACCAGUCAUGCACUCUU

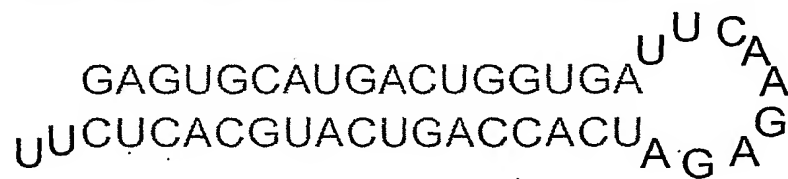
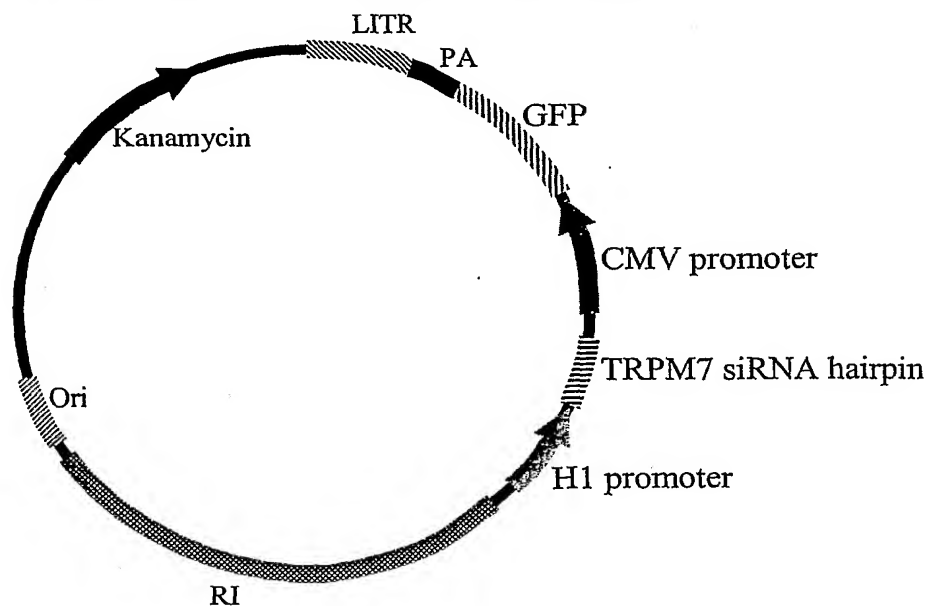
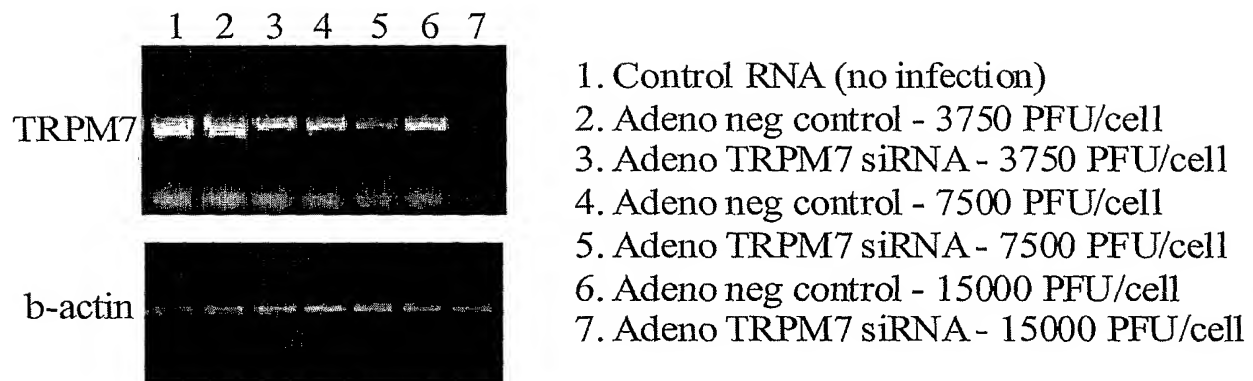
**TRPM7 siRNA hairpin in pAdTrack vector**

FIGURE 11

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**FIGURE 12**

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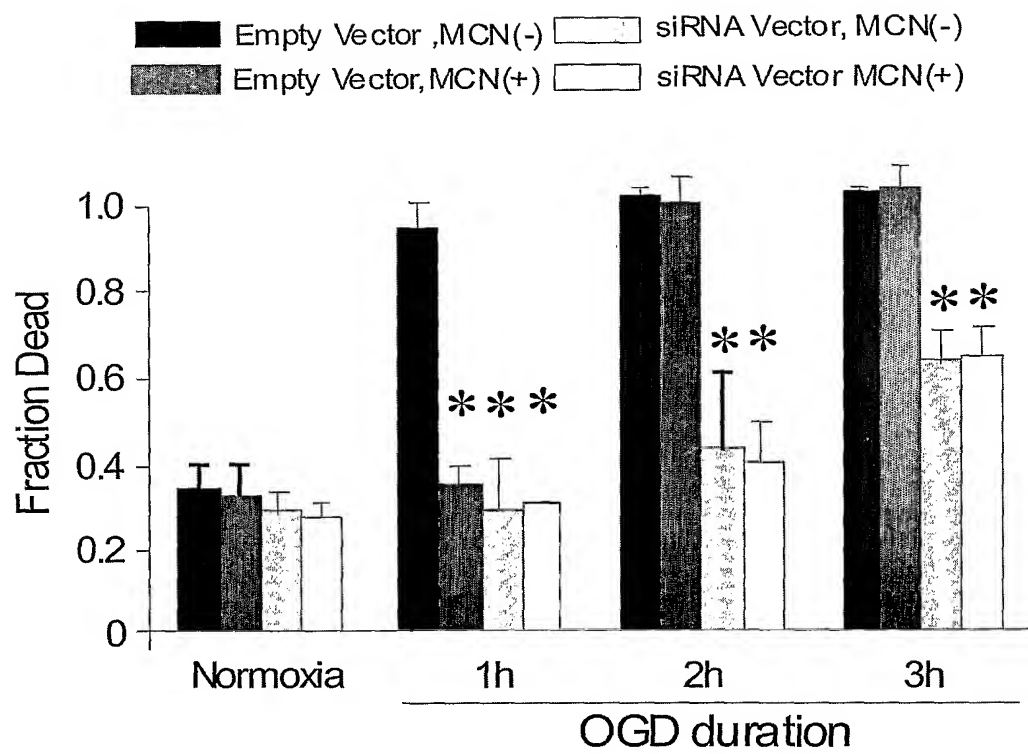
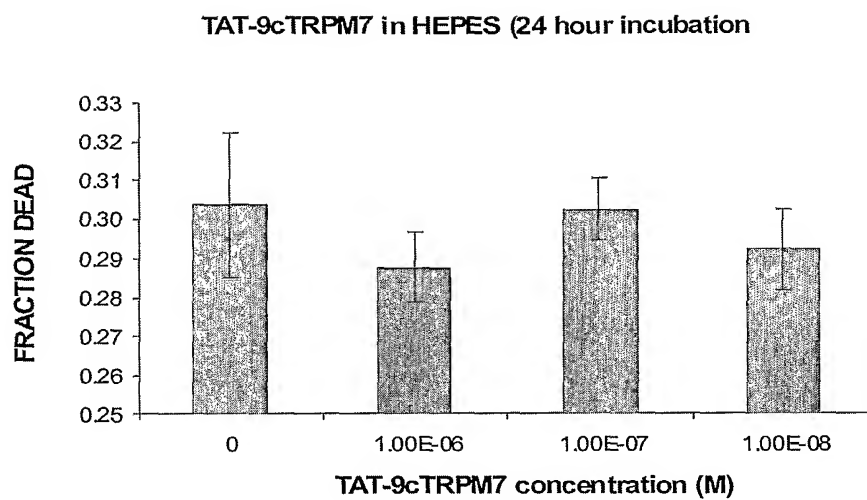


FIGURE 13

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A



B

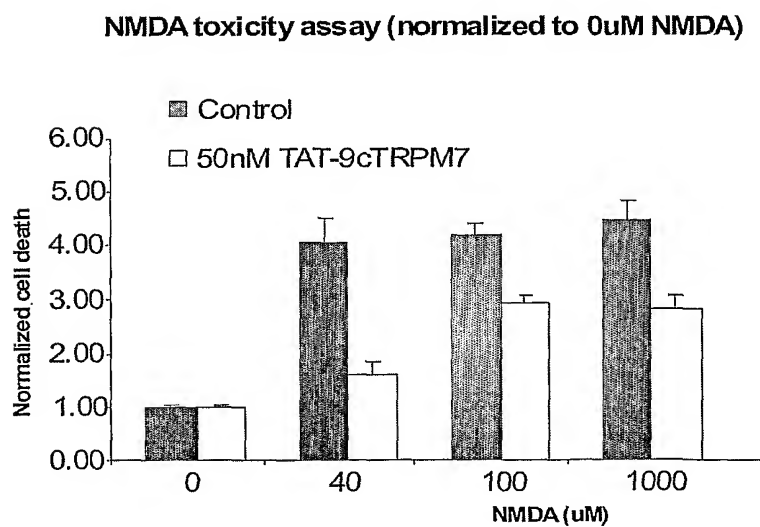


FIGURE 14